

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Lines 8 and 9, which reads “producing a resulting yaw moment, in determining a desired yaw rate from the information of an on-board device for profiling a roadway in a control unit” is unclear.

3.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12,13,19,21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent number JP 11011130 issued to Shibue et al, hereafter referred to as Shibue in view of U.S. patent number 6,719,087 issued to Demerly. Schulke discloses a method for operating an active chassis system of a motor vehicle, comprising:

arranging support assemblies which interact with actuating elements 5 between the wheels and a vehicle body, with wheel contact forces of the wheels assuming different values as a result of actuation of the actuating elements 5 and a side force being generated at the wheels having the toe-in angle,

producing a resulting yaw moment, in determining a desired yaw rate from the information of an on-board device for a roadway in a control unit, and

setting the wheel contact forces as a function of the determined desired yaw rate (Patent Abstract);

wherein the desired yaw rate is determined based on data obtained from a velocity sensor 31 and a yaw rate sensor 33;

wherein the wheel contact forces are set by the actuating elements 5 to change prestressing of a hydraulic spring 5;

wherein the slip angle is changeable.

According to Shibue, change of the wheel contact forces plays as a yaw moment for reducing a car body slip angle detected by a yaw rate sensor 33, wherein the actuators 5 are actuated to give the vehicle a predetermined desired yaw rate through adjusting the ground load (wheel contact forces).

Shibue fails to disclose the wheels as having a toe-in. Demerly teaches a method of improving vehicle stability wherein the wheels 38 of the front axle may be toed-in to better effectuate directional response of the motor vehicle (column 5, lines 16-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shibue with the teaching of Demerly such that

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the wheels of the front axis are toed-in to effectuate better directional response from the vehicle.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shibue and Demerly, as applied to claims 12,13,19,21, and 22 above, and further in view of U.S. patent number 7,143,864 issued to Mattson et al, hereafter referred to as Mattson. Shibue and Demerly fail to disclose that the desired yaw rate is determined as a function of a steering wheel angle. Mattson teaches that it is common in the art to determine a desired yaw rate for the travel of a vehicle through detection of the steering wheel angle (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shibue and Demerly with the teaching of Mattson's method of calculating a desired yaw rate as a function of the steering wheel angle to more accurately ascertain the driver's intent in comparison to the road surface.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shibue and Demerly, as applied to claims 12,13,19,21, and 22 above, and further in view of U.S. patent number 6,663,113 issued to Schulke et al, hereafter referred to as Schulke. Shibue and Demerly fail to disclose the wheel contact forces as being set by changing of the prestressing of a stabilizer. Schulke teaches a system and method for reducing stopping distance and improving traction in motor vehicles, wherein the system includes actuators 4 for changing the prestressing of a stabilizer in order to adjust the wheel contact forces of the four wheels of the vehicle in order to affect yaw compensation for a vehicle driving over a surface with differing coefficients of friction. Therefore, it would

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have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shibue and Demerly with the teaching of Schulke's stabilizer actuators since it would have simply required switching one means of actuation for another known means in order to yield predictable results.

Allowable Subject Matter

6. Claims 15-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 6/8/2011 have been fully considered but they are not persuasive. Examiner contacted the Applicant's representative about a possible minor change to the claim language in order to make the claim allowable over the prior art. As it is written, the limitation in claim 12 of "an on-board device for profiling a roadway" is simply functional language and does not really add any structural weight to the device. Without the limitation that the device actually profiles the roadway, the prior art still reads upon the claim as it is written since it accomplishes the steps that are actually set out by the claim. Applicant is encouraged to contact Examiner to continue conversation about amending the claim to make it allowable.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY WILHELM whose telephone number is (571)272-6980. The examiner can normally be reached on 9:00 AM to 5:30 PM Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Timothy D Wilhelm
Examiner
Art Unit 3616

/Timothy D Wilhelm/
August 27, 2011

/Paul N Dickson/
Supervisory Patent Examiner, Art Unit 3616